MULTIMEDIA ADDRESS GENERATOR

ABSTRACT

Embodiments of the invention provide an automatic address generator that generates an address sequence directly using counters that count between predefined start and stop values in accordance with a predefined modes of indexing. The counters support slipping when counting to support convolutional filters in one-dimension (1D) and two-dimension (2D). For 2D indexing, a first counter indexes in the X direction and a second counter indexes in the Y direction in memory. The values from the first and second counter are combined with an offset value to form an address directly to memory